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Research Report 1535

Army Family Composition and Retention

Stuart H. Rakoff and Julia H. Doherty
Decision Science Consortium, Inc.

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<p>As part of the Army Family Research Program (AFRP), this research describes the demographics of family composition (marriage, childbearing) and the relationship between family composition and retention intentions.</p> <p>A data file of Army respondents to the 1985 Department of Defense (DoD) Survey of Officer and Enlisted Personnel was created and a series of new variables specified for this analysis. Additionally, data from the 1978-79 DoD Survey of Officer and Enlisted Personnel were used. The data analysis identified patterns of marriage and childbearing among Army enlisted personnel and officers. Further analysis focused on the relationship between family composition and change in family composition and the intent to remain in the Army as expressed in the survey instrument. The report is addressed to a policy and program audience, not a technical audience.</p> <p>Fewer enlisted males entered the Army single in 1985 than in 1979. Also, more enlisted males had children at time of entry. There were no differences in marital status for the</p> <p style="text-align: right;">(Continued)</p>				
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two cohort groups of enlisted females, but more enlisted females entered with children in 1985 than in 1979; the percentage with children doubled over this period. The percentage of females who were single parents tripled from 1979 to 1985. More male and female officers were single at time of entry in 1985 than in 1979.

Although the vast majority of Army personnel enter unmarried and without children, almost half of the enlisted males and two thirds of officer males are married with children. Only about one quarter of the women in the Army are married with children, but they have fewer years of service and are younger on average. When controlled by length of service, the differences between the males and females are smaller, but males are still more likely to be members of households with spouses and children than are females.

Married personnel tend to have a higher intention of remaining in the Army than do single personnel, especially males. This is true for both enlisted personnel and officers; at each years-of-service (YOS) point, the average reenlistment probability was higher for married men than it was for single men and more married than single officers expressed an intention to remain in the Army for a full career.

For males, adding children to the family increases retention intent, except for officers who entered single but had children during the first 3 years of service. The opposite seems to be true for females.

The Army Community and Family Support Center (CFSC) reviewed an earlier version of this report and stated that it will be useful in its work with families. The finding that marriage and parenthood increases with age and length of service suggests that the Army will need to increase the numbers and kinds of family supports available if it is to succeed in keeping a smaller/older force in the year 2000. The finding that females are more likely to be single parents suggests that the Army will need to increase supports for that group if the Army chooses to increase the percentage of females in the force. The finding that marital and fertility decisions are different for males and females who remain in the Army requires additional research to show how best to accommodate this phenomenon.

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Army Family Composition and Retention

Stuart H. Rakoff and Julia H. Doherty
Decision Science Consortium, Inc.

Personnel Utilization Technical Area
Paul A. Gade, Chief

Manpower and Personnel Research Laboratory
Curtis L. Gilroy, Acting Director

U.S. Army Research Institute for the Behavioral and Social Sciences
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
Department of the Army

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FOREWORD

The Army Family Research Program (AFRP) is a 5-year integrated research program started in November 1986 in response to research mandated by the 1983 CSA "White Paper on the Army Family" and the subsequent CSA "Army Family Action Plans (1984-1988)." The objective of the research is to support the Army Family Action Plan through research that will (1) determine the demographic characteristics of Army families, (2) identify motivators and detractors to soldiers remaining in the Army, (3) develop pilot programs to improve family adaptation to Army life, and (4) increase operational readiness.

The research is being conducted by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) with assistance from Research Triangle Institute, Caliber Associates, and HUMPRO. It is funded by Army research and development funds set aside for this purpose under Management Decision Package (1U6S).

The Army sponsor for this effort, the Army Community and Family Support Center (CFSC), reviewed and approved an earlier draft of this report. Their comments indicate that this analysis of Army family composition and the relationship of family composition to the retention of officer and enlisted personnel will be useful in revising Army programs and policies.



EDGAR M. JOHNSON
Technical Director

ARMY FAMILY COMPOSITION AND RETENTION

EXECUTIVE SUMMARY

Requirement:

This research, as part of the Army Family Research Program (AFRP), describes the demographics of family composition (marriage, childbearing) and the relationship of family composition to retention intentions.

Procedure:

A data file of Army respondents to the 1985 Department of Defense (DoD) Survey of Officer and Enlisted Personnel was created and a series of new variables specified for this analysis. Additionally, data from the 1978-79 DoD Survey of Officer and Enlisted Personnel were used. The data analysis identified patterns of marriage and childbearing among Army enlisted personnel and officers. Further analysis focused on the relationship between family composition and change in family composition and the intent to remain in the Army as expressed in the survey instrument. The report is addressed to a policy and program audience, not a technical audience.

Findings:

Fewer enlisted males entered the Army single in 1985 than in 1979. Also, more enlisted males had children at time of entry. There were no differences in marital status for the two cohort groups of enlisted females, but more enlisted females entered with children in 1985 than in 1979; the percentage with children doubled over this period. The percentage of females who were single parents tripled from 1979 to 1985. More male and female officers were single at time of entry in 1985 than in 1979.

Although the vast majority of Army personnel enter unmarried and without children, almost half of the enlisted males and two thirds of officer males are married with children. Only about one quarter of the women in the Army are married with children, but they have fewer years of service and are younger on average. When controlled by length of service, the differences between the males and females are smaller, but males are still more likely to be members of households with spouses and children than are females.

Married personnel tend to have a higher intention of remaining in the Army than do single personnel, especially males. This is true for both

enlisted personnel and officers; at each years-of-service (YOS) point, the average reenlistment probability was higher for married men than it was for single men, and more married than single officers expressed an intention to remain in the Army for a full career.

For males, adding children to the family increases retention intent, except for officers who entered single but had children during the first 3 years of service. The opposite seems to be true for females.

Utilization of Findings:

The Army Community and Family Support Center (CFSC) reviewed an earlier version of this report and stated that it will be useful in its work with families. The finding that marriage and parenthood increases with age and length of service suggests that the Army will need to increase the numbers and kinds of family supports available if it is to succeed in keeping a smaller/older force in the year 2000 (Office of the Deputy Chief of Staff for Personnel, Department of the Army, 1989). The finding that females are more likely to be single parents suggests that the Army will need to increase supports for that group if the Army chooses to increase the percent of females in the force. The finding that marital and fertility decisions are different for males and females who remain in the Army requires additional research to show how best to accommodate this phenomenon.

ARMY FAMILY COMPOSITION AND RETENTION

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ARMY FAMILY COMPOSITION AND RETENTION

Introduction: Purpose and Organization

In November 1986 the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) initiated a multi-year project to perform research on the relationships between Army policies and programs and Army families. In this project, special attention is directed to readiness, retention and family wellness. One major focus of the Army Family Research Program (AFRP) is concerned with understanding the impact that families have on the decisions of individual soldiers to remain in the Army, and to identify Army family policies and programs which influence these retention decisions. This report is one of a series of products from this ongoing research program, and is intended to provide the user with a nontechnical perspective on the importance of family composition as an important dimension of the family-retention interaction.

General Edward S. Myer (1983), former Chief of Staff of the Army, has been widely quoted for saying that "We [The Army] recruit soldiers, but we retain families." What General Myer is suggesting, we believe, is that family composition and the change in family composition over the course of the military career, are important variables which must be understood by the Army in order to explain, predict and improve the retention behavior of Army personnel. For a force that typically recruits young men and women and expects to retain large numbers of them through at least middle age, patterns of marriage and family formation become important factors in the career plans of the population. This report, therefore, focuses on gaining a better understanding of these family transition patterns among members of the United States Army, and on beginning to understand the relationships between patterns of family composition and intentions to remain in or leave the Army.

We have used two previously collected data sets for the analyses presented in this report. The major source of data was the Army subset from the 1985 DoD Survey of Officers and Enlisted Personnel, collected by the Defense Manpower Data Center (DMDC) in 1985. The sample for this research consisted of all members of the Army who had at least 10 months of active service as of 30 March 1985 when questionnaires were distributed. Data were weighted and edited as part of an earlier contract for DMDC. Additionally, data from the 1978-79 DoD Survey of Officers and Enlisted Personnel, conducted for the Office of the Secretary of Defense by the Rand Corporation (1979) and made available by DMDC, were also used. The primary use of the 1979 data has been to provide a benchmark point from which some comparisons of change in family composition over time can be made.

This report follows a briefing format, with the major findings presented in graphic form. This format is intended to allow the reader to scan the figures quickly and read the text when additional detail or explanation is desired. This format is not intended to replace more formal scientific technical reports, but rather to explore the usefulness of this mode of presentation.

Three major objectives will be accomplished in this report. The first is to describe the family composition of the Army population at two points in time—at the entry of that population into the Army, and at the time of the survey, that is, 30 March 1985. A substantial amount of funds has been devoted in recent years to programs for Army families. The process of understanding family services and the demographic characteristics of Army families becomes, therefore, an important objective of the Army Family Research Program. This report provides a clear picture of the members of the Army and their family composition both at time of entry and at the current time. This will provide a basis for further work on the Army Family Research Program.

The second objective of the research is to describe the transitions that take place among family categories. For example, we know that substantial majorities of Army personnel enter the force unmarried. It is important to know the rate at which they marry and the time span in which they have children in order to understand the impact that these transitions have on retention. The analyses reported here examine, in aggregate, the movements of members of the active Army from one status, single, for instance, to another status, married. It also focuses on the changes in the marital and parenthood status as the force ages through time. Both of these outcomes—marriage and parenthood—are included in the analysis in order to gain a better understanding of the points at which members of the Army are making these transitions and, therefore, to identify the points at which the Army needs to pay special attention to the concerns of these personnel.

The third objective of the research is to examine the relationships between family composition, and the change in family composition, and the expressed retention intentions of the Army respondents. Because this is an investigation based on survey research data, data on the actual retention or career behavior of members of the force are not available. Rather, we are required to rely on the responses to questions concerning the intention of individual members to reenlist—in the case of enlisted—or remain for a complete career—in the case of officers. Their expectations, or intentions, have been shown in the literature to be closely predictive of actual subsequent behavior (Bonnette & Worstine, 1979; Hiller, 1982; Seboda & Szoc, 1984; Steel & Ovalle, 1984).

Subsequent work on the AFRP using an enhanced database that includes actual retention behavior will allow these hypotheses to be tested more completely.

This report is divided into five sections:

- Family Composition at Entry
- Current Family Composition
- Change in Family Composition
- Family Composition and Retention Intention
- Conclusions

In the first section we will look at the reported composition of the families of current Army personnel when they first entered the Army. We have defined family composition to have two dimensions—married or not married, and

with or without children. These two dimensions lead us to define four categories of family composition:

Single, without children (S/N)
Single, with children (S/C)
Married, without children (M/N)
Married, with children (M/C)

These four categories of family composition do not capture all of the richness which is desirable but are those which could be constructed reliably from the available data sets. More precise categories will be developed for future AFRP work which will focus more closely on the concept of family life cycle as understood by developmentalists such as Duvall (1974) and Hill (1970). The 1985 Survey instruments did not collect complete information about composition of the family at time of entry, so some of the cases of these variables have been inferred from other data. Specifically, while the survey did ask for marital status at entry, it did not ask about the presence of children in the household at entry. This means that to identify families with and without children at the time of entry, we have been forced to the following logic. The age of the oldest child living in the household, as reported on the survey, has been compared to the total years of service reported on the survey. If positive, this indicates there were children present when the member entered. The difficulty of this attribution is, of course, that it is possible that members have married spouses who bring their own children to the marriage and that, therefore, we are attributing children to members at entry who, in fact, were not dependents of those members at the time of entry. This could also be true for children who were adopted during the course of the marriage—these calculations would indicate that they were present in the family at the time of entry. The result is, we believe, a slight overstatement of the number of children present at entry, but that overstatement is likely to be small and should not distort the major findings of the research.

The analysis reported in the first section is not based on complete entry cohorts for past years, but only on members of each entry cohort who were still in the Army at the time of the survey in March 1985. Controls for years of service, age at entry, and gender are used to explain patterns of entry family composition. Comparisons to data from the 1979 survey are included. The second section of the report focuses on the current composition of Army families as reflected in the March 1985 survey data. These data, also controlled by age, gender, and years of service, present a basic demographic portrait of Army families.

The third section develops measures of transition from the family composition at entry to current family composition. The major emphasis of this section is to define the patterns of change among the four family composition groups.

In the fourth section, the impact of family composition and changes in family composition on retention intentions are explored. Questions such as: "Is marriage associated with increased retention intention?" and "Is the

presence of children associated with reduced retention intention?" are answered.

Finally, the last section summarizes the analyses, discusses implications of the findings for Army policy, and makes recommendations for how these analyses impact future data collection and analysis in the Army Family Research Program.

Family Composition at Entry

A majority of the respondents to the 1985 Survey entered the Army unmarried. Figure 1 presents data on the percentage of both officers and enlisted personnel, by gender, who were single at the time of entry. Overall, 68% of the officers and 83% of the enlisted personnel were unmarried when they entered the Army, a difference explained largely by the fact that officers at entry are older than are enlisted personnel. There are some differences by gender, with women less likely to be married when they entered than were men, especially among officers. Eighty-one percent of female officers were single when they entered, compared to 66% of male officers. For enlisted personnel, 86% of the females and 83% of the males were single at entry.

Figure 2 presents these data by the current year-of-service (YOS) group. We must be careful in interpreting these data because a number of factors are at work here, including possible differences in retention rates among members in different family-composition categories, which make the estimates of the demographics of the entry cohorts complicated. However, there was remarkable stability in the percentage of the successive YOS groups who entered single. For most cases, just over 80% entered single, and in all years, a slightly larger percentage of enlisted women entered single than did the males. The single exception was females currently in the 15-20 YOS group, over 90% of whom were single at entry. These enlisted women who entered the Army in 1966-1970 appear to be slightly different on this measure than earlier or later cohorts, but we cannot offer any satisfactory explanation for the difference.

For officers, the differences between the genders in successive YOS groups were more striking. Women with more years of service were more likely to have been single when they entered the Army than were women who entered more recently. Seventy-seven percent of the women officers in the 1-3 YOS group were single at entry, compared to 97% for those with more than 15 years of service. Males with more years of service, on the other hand, were less likely to have been single at entry than more recent entrants. As with enlisted, there is no apparent explanation for these patterns.

One explanation for the patterns of marital status at entry is age at time of entry. The likelihood of marriage increases with age, so we should expect that officers, whose age at entry was higher than that of enlisted personnel, would have had higher rates of marriage at entry. This difference was apparent in Figure 1. Almost half of all enlisted personnel responding to the survey entered the Army at age 18 or younger, while officers were most likely to be in their early twenties at entry (upon graduation from college).

Figure 1: Marital Status at Entry:
Percentage Entering Single

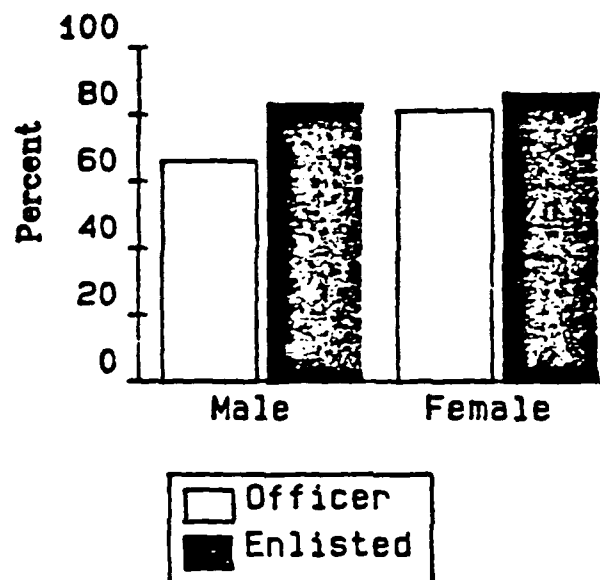
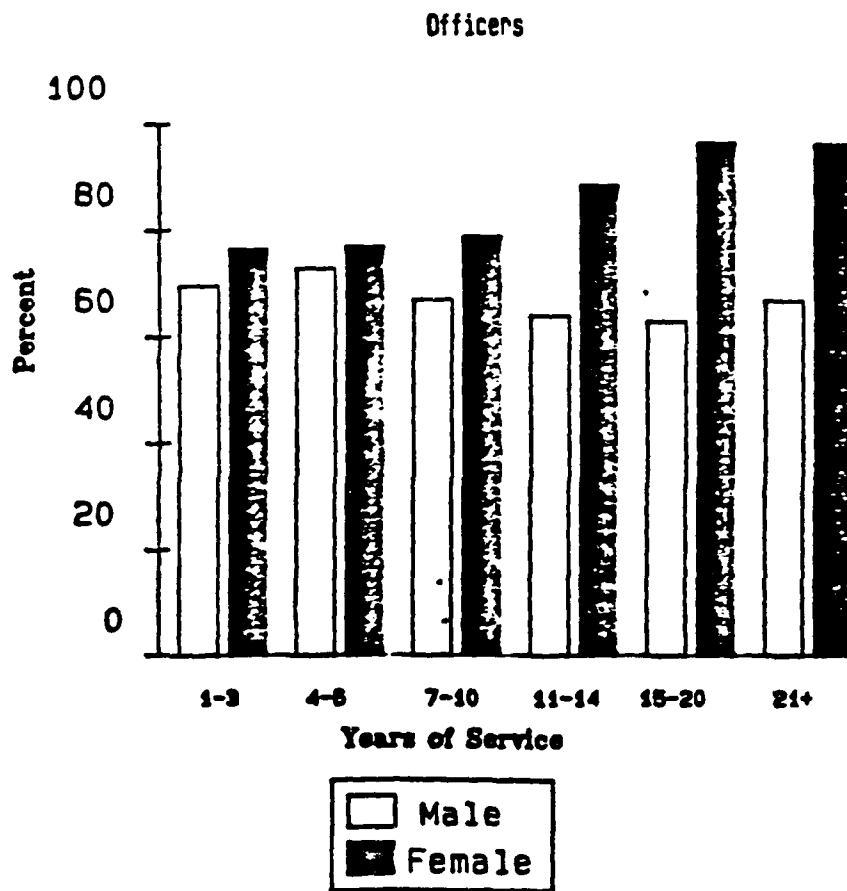
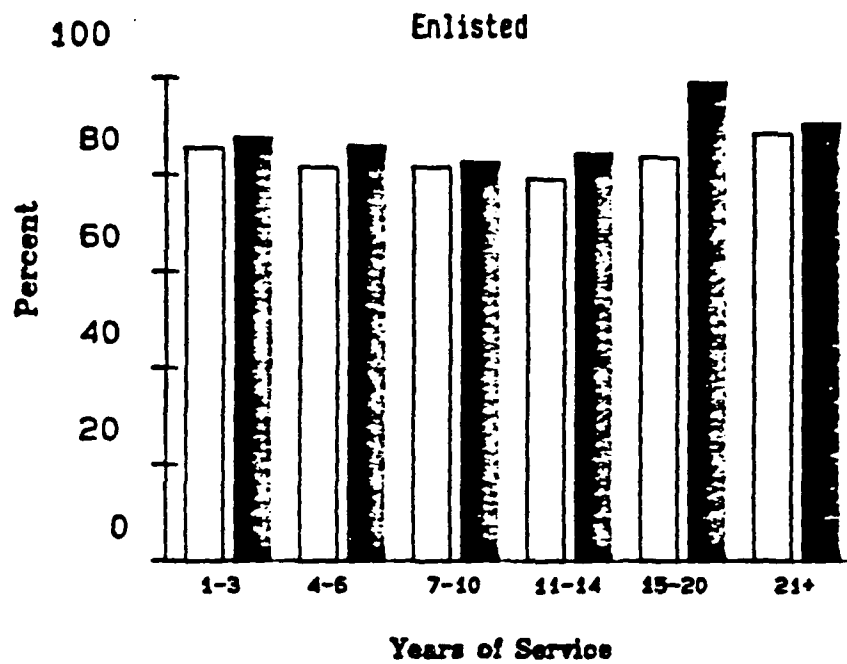


Figure 2 Marital Status at Entry:
Percentage Single at Entry
by Years of Service



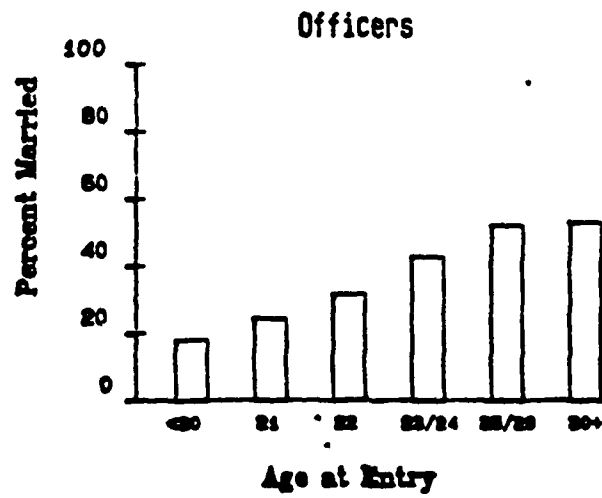
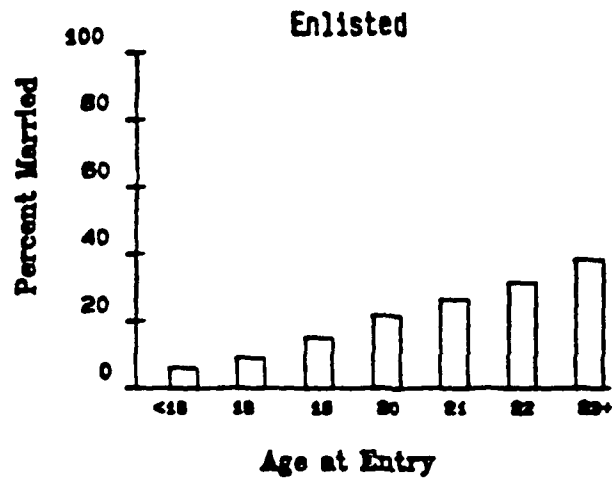
In Figure 3, we present data which demonstrate the clear relationship between age at entry and marriage at entry for officers and enlisted personnel. Only 7% of enlisted personnel whose age at entry was less than 18 were married at that time, but 38% of the enlisted personnel who entered at age 23-34 were married at entry. For those few officers who entered the Army at age 20 or less (mainly warrant officers), only 20% were married at entry (a little less than for enlisted who entered at age 20). Officers who entered the Army at ages 23-24 were more likely to have been married at the time; for this sample, 43% were married at entry. This proportion climbed even higher for officers whose age at entry was 25 or higher. Officers who entered in these ages above 23 were more likely to be married than were enlisted personnel who entered at the same ages.

The results suggest that the Army needs to give attention to the ages of its entry cohorts as one way of controlling and predicting the marital status of its members. If, in fact, Army leaders find that being married lends stability and maturity and improves the quality of service and the retention probability of enlisted personnel, they may want to consider focusing their enlistment priorities on older rather than younger recruits. On the other hand, if Army leaders find that marriage becomes a barrier to effective service because of the distractions that it presents, they may want to consider recruiting more lower-aged entrants. These data show that marital status is clearly related to the age of the entrant and may have implications for defining what recruitment and retention policies need to be.

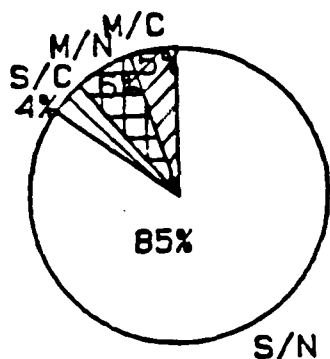
Understanding changes in the entry family composition of Army families can be important in determining the need for, and effectiveness of, programs and policies addressed to Army families. For this reason, we present some data describing two entry cohorts. From the 1979 DoD Survey, we have selected those members who were in years of service 1-3 in 1979, and from the 1985 Survey, we have selected personnel in those same years of service. Thus, the 1979 group entered the Army in 1976-1978, before the current policy focus on Army families that began in the early 1980s, while the 1985 group entered in 1982-1984, at the time in which the initial Army Family Action Plan was being written and widely discussed. Data comparing the entry marital status for these two cohorts are displayed in Figures 4 and 5.

There have been changes in the family composition at entry for these two cohorts. For enlisted personnel, fewer males entered single in the 1985 group (85%) compared to the 1979 group (89%). Also, more enlisted males had children at entry in 1985 (12%) than in 1979 (9%), with that increase occurring in both single and married males with children. For female enlisted personnel, there was no change in entry marital status in this period, with 86% of the 1979 group entering single, compared to 87% of the 1985 group. More females in 1985 did enter with children, however. In 1979, 7% of entering females had children, but by 1985 this had doubled to 14%. Especially significant is the fact that the percentage of female entrants who were single with children increased from 2% in 1979 to 8% in 1985.

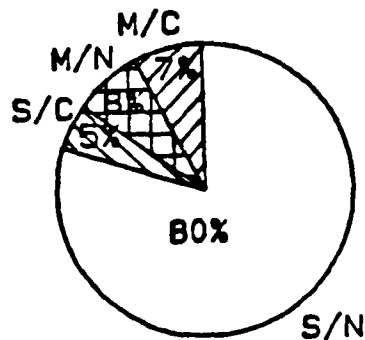
Figure 3: Percentage Married at Entry by Age at Entry



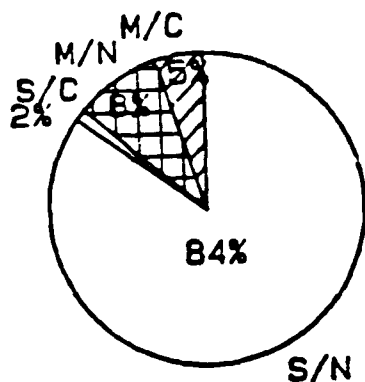
**Figure 4: Family Composition at Entry for Two Entry Cohorts:
Enlisted Personnel with 1-3 Years of Service
1979 and 1985**



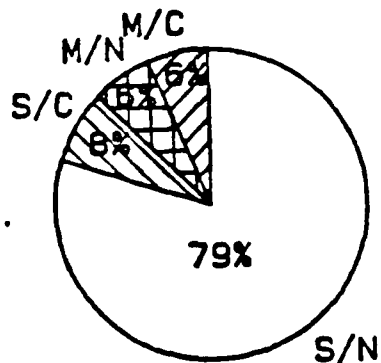
Male 1979



Male 1985



Female 1979

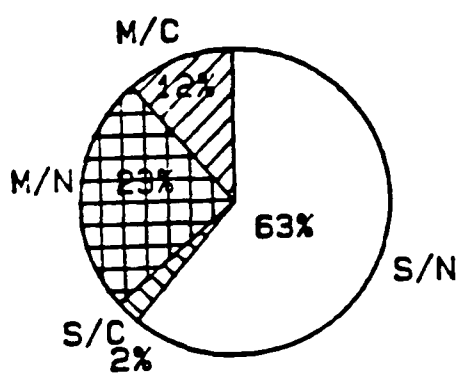


Female 1985

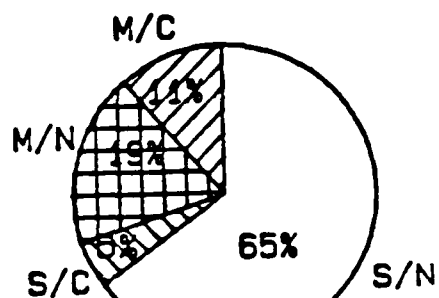
Key:

- S/N - Single, No Children
- S/C - Single, Children
- M/N - Married, No Children
- M/C - Married, Children

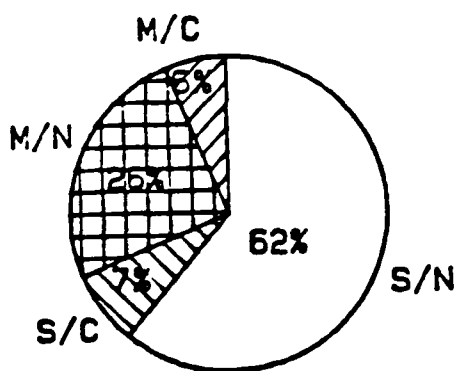
**Figure 5: Family Composition at Entry for Two Entry Cohorts:
Officers with 1-3 Years of Service 1979 and 1985**



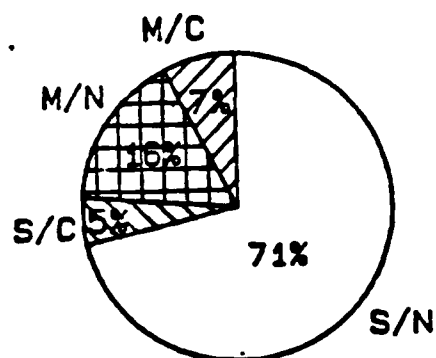
Male 1979



Male 1985



Female 1979



Female 1985

Slightly different changes were found for officers. More male officers were single at entry in the 1985 group (70%) compared to the 1979 group (65%), consistent with the generally increasing age of marriage observed for college graduates, in general. Female officers were also more likely to be single in the later time period (69% were single at entry in 1979 compared to 76% in the 1985 cohort). Substantially fewer females were married without children at entry; this category declined from 26% of female officers in the 1979 data to only 16% in the 1985 data. There was little change in the percentage of female officers with children at entry, which was 13% for the 1979 group and 12% in 1985.

Another way of evaluating changes in family composition over time is to track the behavior of a single cohort. While a longitudinal research design is best for this purpose, we can, to a limited extent, use selected data from the two cross-sectional investigations for this purpose. The personnel in the first to third year of service for the 1979 survey would, if they remained in the Army, be in the seventh to tenth year of service at the time of the 1985 Survey. Essentially, examining these two groups--the YOS 1-3 group from the 1979 Survey and the YOS 7-10 group for the 1985 Survey--allows us to age that 1979 entry cohort and look for differences. In this case, we are looking for changes in the marital status at entry for the members of the 1-3 YOS group in 1979, compared to the members of that entry cohort who were sampled in 1985. These data are displayed in Figure 6, and allow us to begin to make some initial observations about the relationship between family composition and retention intentions.

Eighty-nine percent of the male enlisted personnel in the 1-3 YOS group in the 1979 sample were single when they entered the Army; however, only 81% of that cohort remaining to 7-10 YOS point in 1985 had been single at entry. The smaller proportion of those who entered single in the 1985 sample and who remained until the seventh to tenth year point suggests that personnel who entered single tended to have a lower rate of remaining in the Army to the 7-10 YOS point than did those who entered married. If this were not the case, the two figures should be approximately the same. The same finding applies to females in this cohort, but the difference is not as large. For male officers, there is no significant difference apparent in retention rates over this period based on marital status at entry. However, for female officers the trend found for enlisted personnel was reversed, suggesting that marriage at entry is negatively associated with retention of female officers. Sixty-eight percent of the female officers in the 1979 entry cohorts were single at entry, compared to 79% of those in the 7-10 YOS group in 1985.

Current Family Composition

In this section we turn from family composition at entry to describe the composition of Army families at the time of the 1985 DoD Surveys. In this section we are attempting to present a very basic demographic portrait of the Army family at that time. Comparisons with data from the 1979 Survey (not reported here) indicate that there have not been substantial changes in family composition in that period.

Figure 7 presents our findings on current family composition for four basic groups: male enlisted; female enlisted; male officers; and female officers.

Figure 6: Differences in Entry Marital Status:
1979 Entry Cohorts and 1985 Cohorts
with 7-10 Years of Service

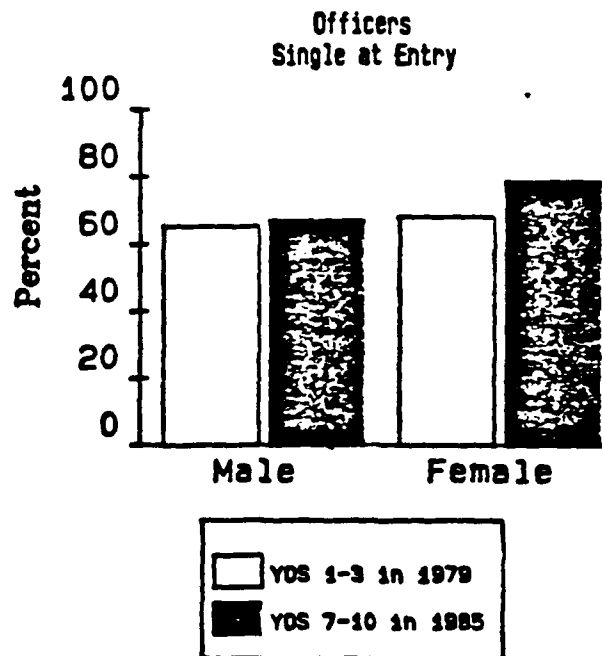
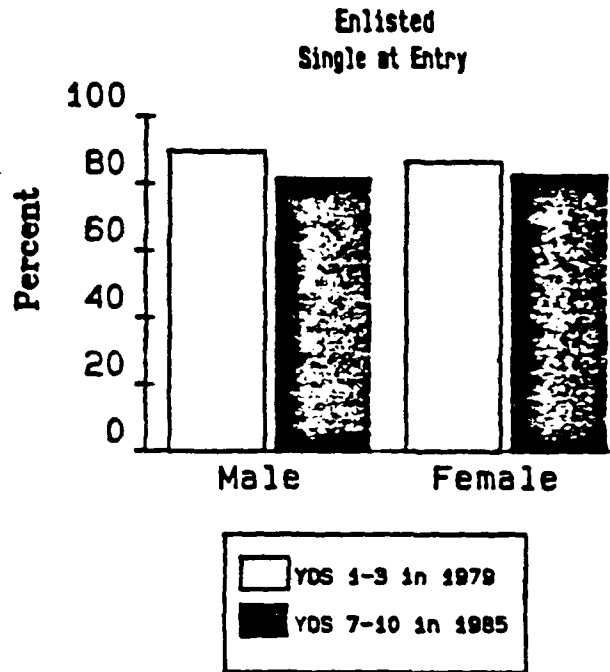
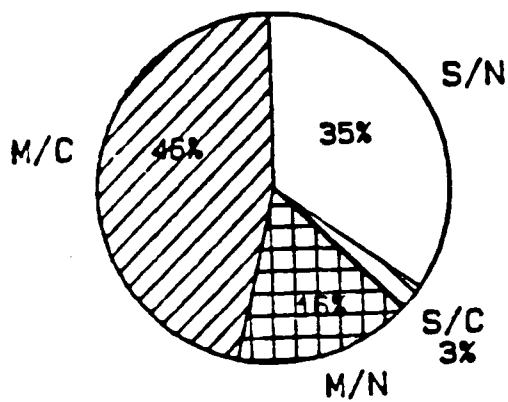
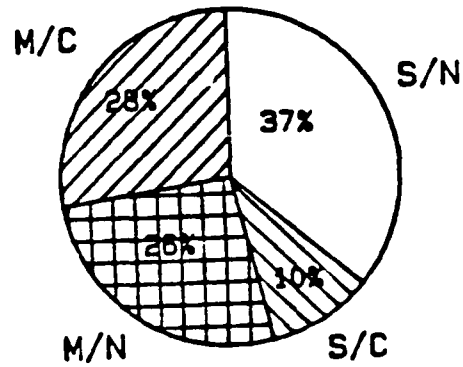


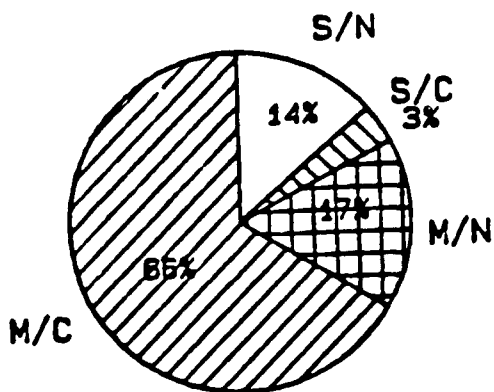
Figure 7: Current Family Composition by Grade and Gender



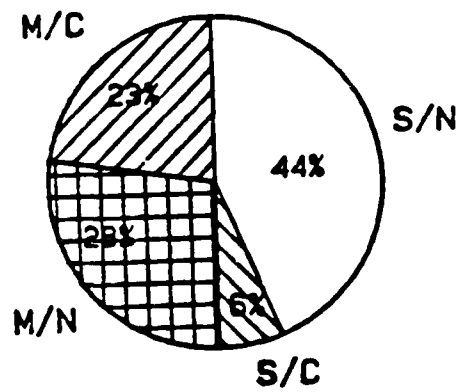
Male Enlisted



Female Enlisted



Male Officers



Female Officers

The categories used here are the same as defined earlier: single, without children (S/N); single, with children (S/C); married, without children (M/N); and married, with children (M/C).

The largest share of enlisted male soldiers were married with children in 1985; 46% fell in this category. This figure is substantially higher than the percentage of female enlisted who were married with children (28%), but is substantially less than the percentage of male officers who were married with children (66%). Female officers were least likely of the four groups to be married with children (23%). Thus, only male officers had a majority who fit the "typical" family category of marriage and children, and only about a quarter of female personnel fit into this typical family category.

Large numbers of personnel were single. Over a third of all enlisted males (38%) were not married, and most of these did not have children, while almost half of all females were unmarried. Only 17% of male officers were unmarried. Small numbers of males were single with children (3%), but much larger percentages of female personnel were in households with children but no husband. Ten percent of enlisted women and 6% of female officers were single parents.

In part, these differences can be explained by age: Army males were older than Army females and officers were older than enlisted personnel (the median age of male officers was 33.6 years, compared to 24.7 years for male enlisted; female officer median age was 29.4 years and enlisted female median age was 23.9). Since enlisted personnel were younger than officers, and females younger than males, we fully expected a higher proportion of enlisted to be single than officers, and a higher proportion of females to be single compared to males. All of these expectations were verified in the data with a single exception—more female officers were single compared to enlisted females (50% versus 47%).

These patterns are more completely presented in the following figures which break the most interesting family composition categories into year-of-service groups. The data in Figure 8 portray the percentage of the force, by grade and gender, who were single without children at different year-of-service points. For enlisted males, there was a sharp drop in the percentage of the force who were single without children—from 64% in YOS 1-3 to only 34% in YOS 4-6. This level was halved again by YOS 7-10, and beyond that point only about 10% of these enlisted males were single (including divorced and widowed) without children. A smaller proportion of male officers was in this category, but the same steady decline with years of service was observable. A smaller percentage of enlisted females in YOS 1-3 were single without children than were enlisted males in this same YOS group, but beyond that initial service period a higher percentage of enlisted women were single without children. The neatly monotonic decline with length of service also was absent; there was only a small difference in the percentage single without children for YOS 4-6 compared to YOS 11-14, and the percentage climbed beyond 14 years of service. A similar pattern was found for female officers. These patterns may reflect, in part, increased divorce rates with length of service, but we were not able to test for that possibility in this paper.

Figure 8: Single Personnel Without Children
By Grade, Gender, and Years of Service

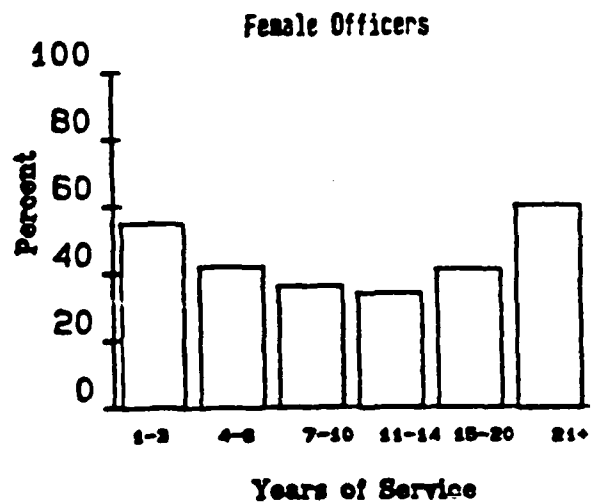
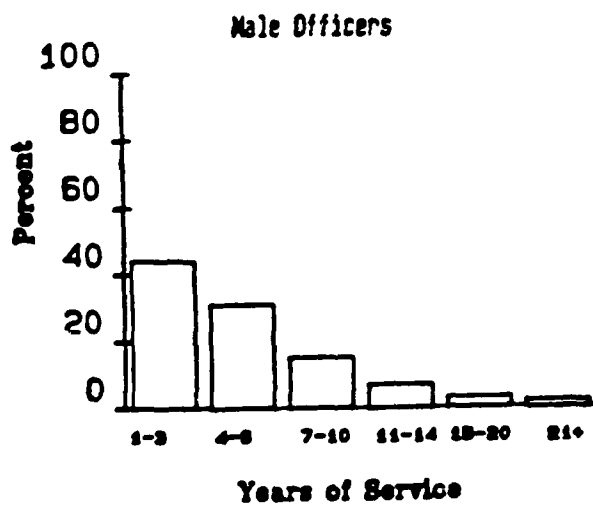
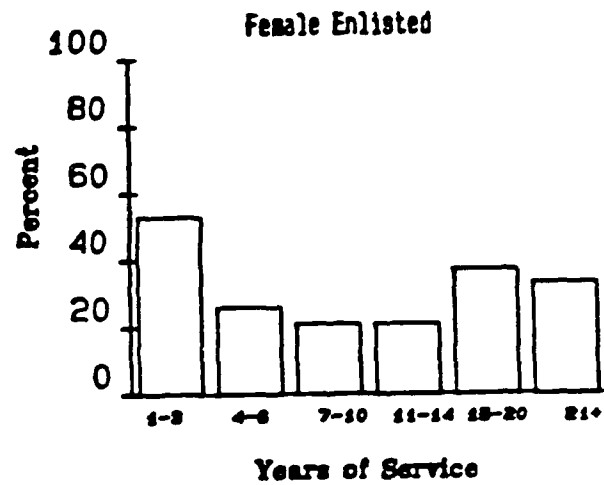
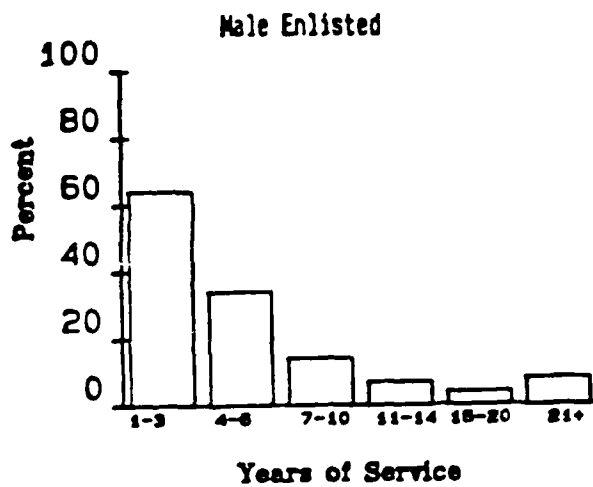


Figure 9 presents similar data for Army personnel who were married and had children. The pattern of these "typical" families for males was quite striking; by the 7-10 YOS point, a majority of households of male personnel fell in this category--this was equally true for enlisted personnel and officers. This typical pattern was much less distinct for women, however. At its highest (YOS 11-14), only 46% of enlisted women were married with children, compared to almost 80% of enlisted males with the same service length. An even smaller proportion of female officers in all YOS groups were married with children. The patterns in this figure revealed substantial differences in family formation among these four groups, differences to which Army family policies must be well attuned to be successful.

Single-parent families present unique challenges to the Army, especially when issues of soldier deployments, mobilizations and child care are concerned. Data in Figure 10 present the percentage of Army personnel (by grade, gender, and year of service) who were single parents. Again, the differences in the patterns among males and females were striking. Because females comprised only about 10% of the Army, it was still true that most single parents in the Army were males, but the pattern by YOS suggested some important differences. For males, both enlisted and officers, single parents were a small and level percentage of the population across YOS groups. No more than 5% of the males in any cell were single parents.

Contrasted to that pattern, a steady increase with YOS in the percentage of enlisted women who were single parents (including divorced and widowed members) is evident in Figure 10. In the lowest cohort (1-3 YOS), 7% of enlisted women were single parents, and by YOS 11-14 this percentage had more than doubled. A similar pattern, although at a lower level, was observed for female officers. The sharp increase in the percentage of single-parent female-headed households indicates an area of significant future focus for the Army Family Research Program.

Change in Family Composition

Having described the family composition at entry and at the time of the 1985 survey, we turn now to an examination of the changes in family composition that have taken place from entry to the survey point. The objective of this section is to describe the patterns which characterize movement from one marital and parenthood status to another in order to get a better picture of how these changes might effect Army family policies and programs. We found earlier that the vast majority of personnel entered the Army single and without children; the percentages for the different categories are: enlisted males, 76%; enlisted females, 78%; officer males, 62%; and officer females, 74%. Since this was by far the largest entry status, we will focus on when in their careers these members tended to marry and have children in this section. Figure 11 presents distributions of family composition for enlisted males who entered the Army single without children and are now in subsequent years of service. Examination of these data clearly reveals the patterns of marriage and family composition we expected to find. For those enlisted personnel still in the first term of service (YOS 1-3), 79% were still single with no children, 14% had married since entry but did not yet have dependent children, 5% had both married and had children, and one percent were now single parents.

Figure 9: Married Personnel with Children
By Grade, Gender, and Years of Service

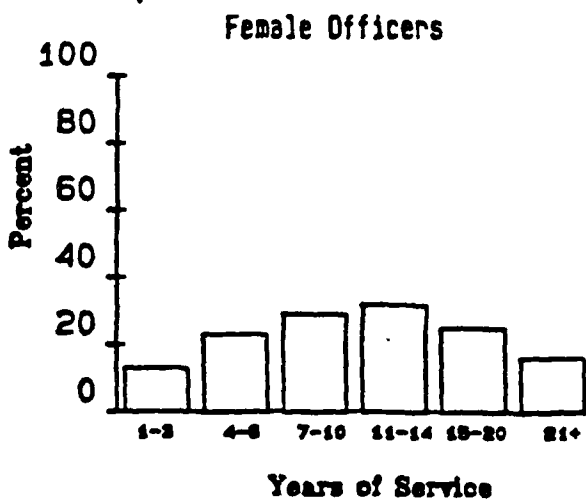
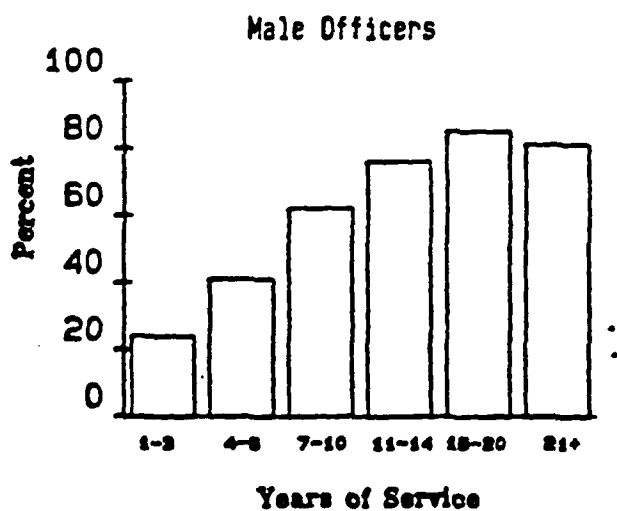
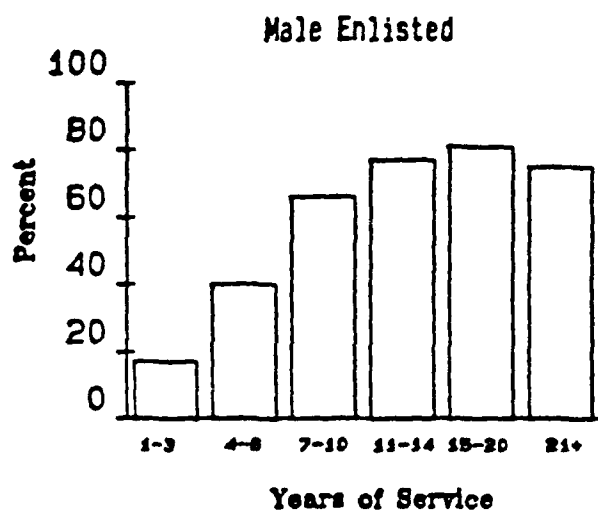


Figure 10: Single Personnel with Children
By Grade, Gender, and Years of Service

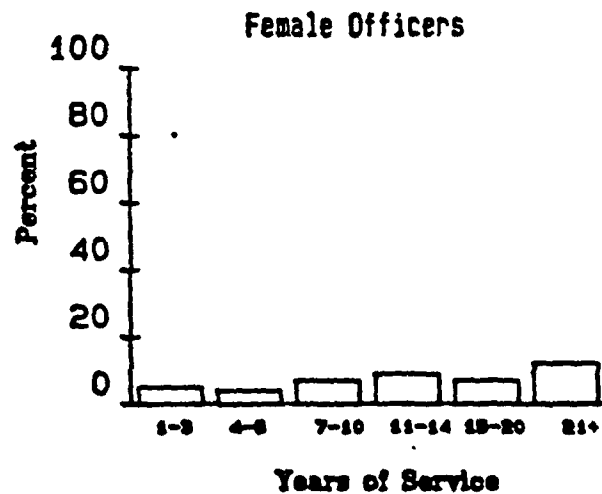
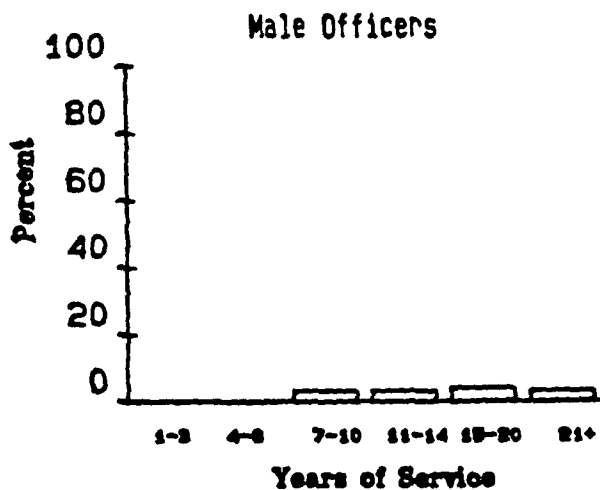
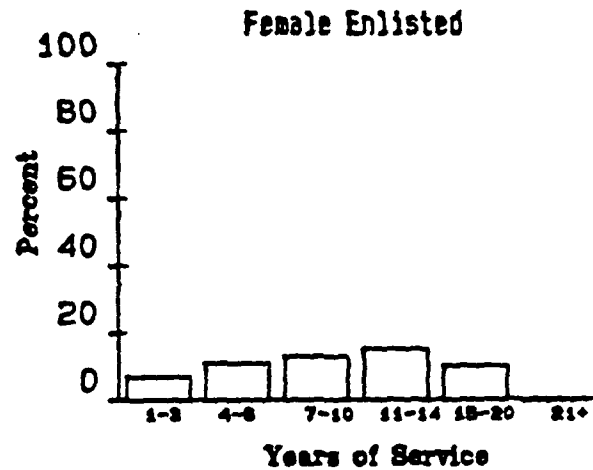
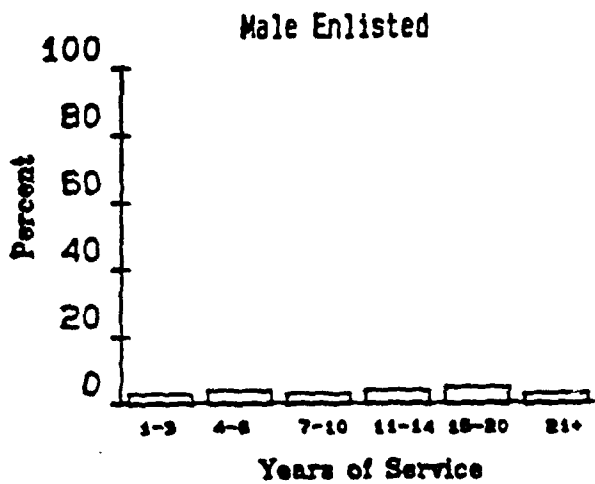
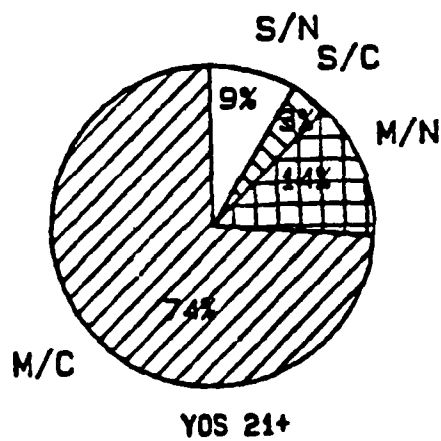
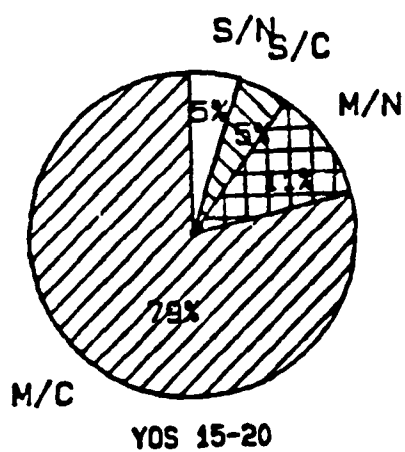
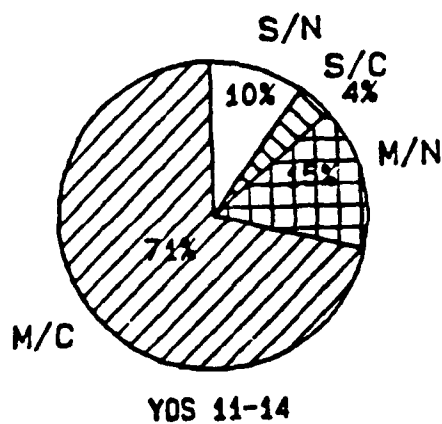
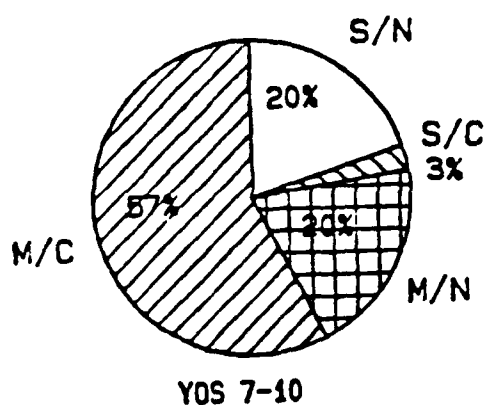
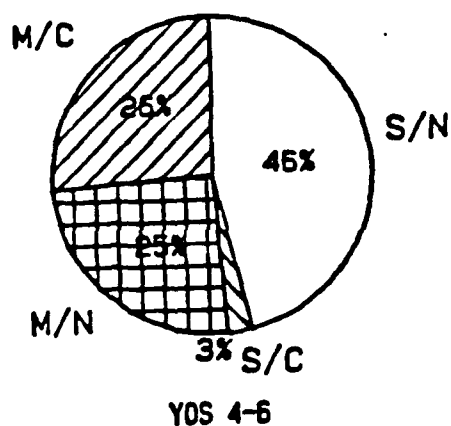
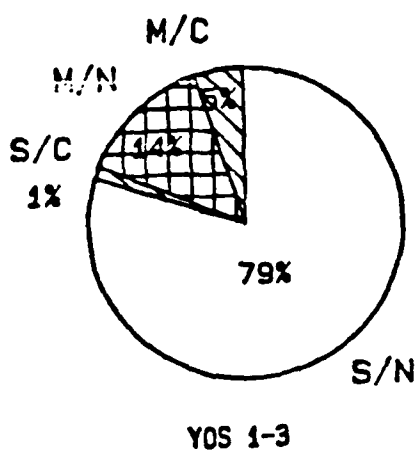


Figure 11: Change in Family Composition: Current Family Composition of Male Enlisted Personnel Who Entered Single without Children By Years of Service



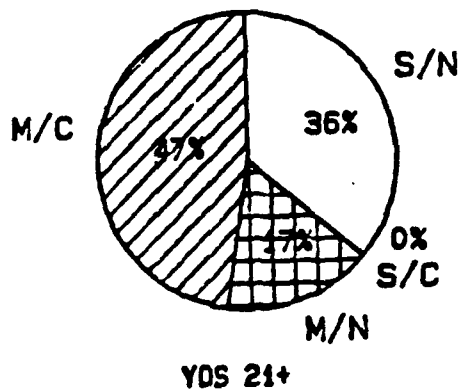
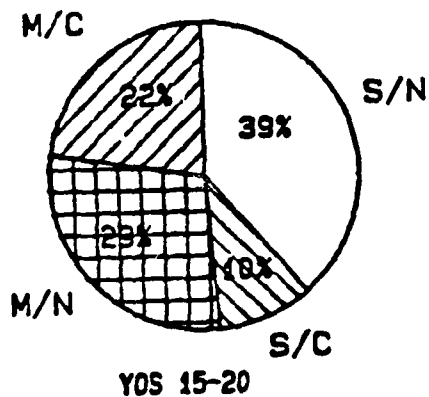
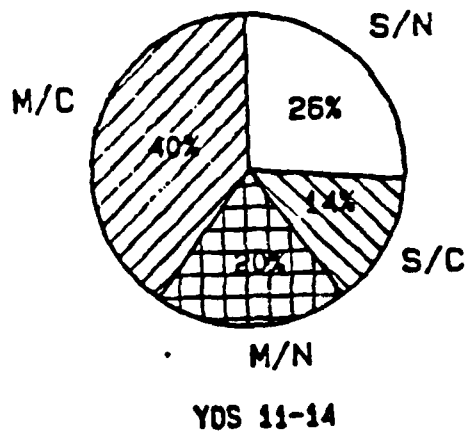
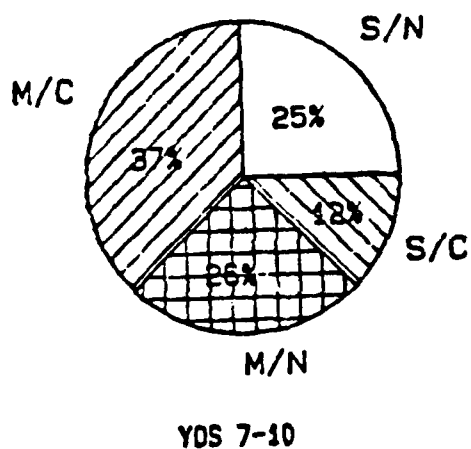
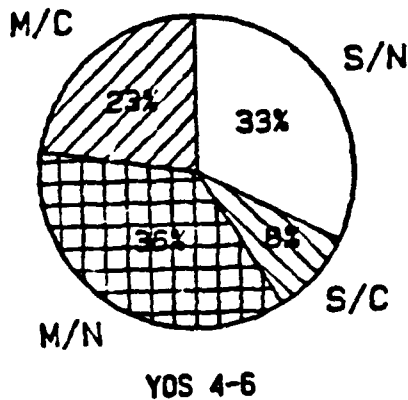
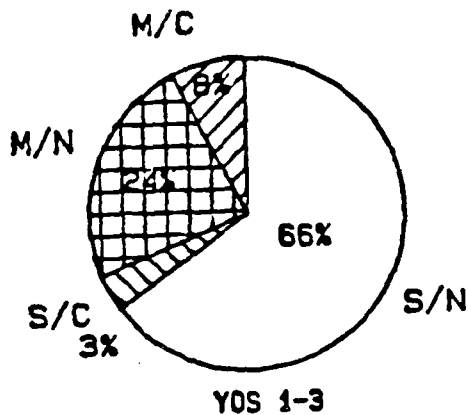
By the time they got to YOS 4-6, a majority of these males were no longer single without children—that category had declined to 46%. The remainder were about equally split between those married with and without children, with a small percentage being single parents (3%). By YOS 7-10, the percentage of the single non-parent entrants had declined to only 20%, and a clear majority (57%) were now married with children. One fifth were married but not parents, while 3 percent were single parents.

At YOS 11-14 the percentage of enlisted males who were still single without children had been halved again to 10%, while the percentage who were married with children had now reached 71%. Married non-parents were now 15% of all enlisted males who had been single non-parents at entry, while single parents had climbed slightly to 4%. By the YOS 15-20 group the percentage of unmarried and childless male enlisted had shrunk even further to only 5%, and married parents had reached 79%. The percentage married without children had continued to decline (now at 11%), and single parents had increased again to 5% of the total. Finally, at years of service beyond the voluntary retirement point, the number of single non-parents rose to 9%. This suggests some underlying incentive for these bachelors or divorced members to remain beyond the retirement point compared to members who had married and had children. The number married with children at this YOS point had declined to 74%, single parents had declined to 3% and married non-parents had increased to 14% of the entry cohort. In general, the pattern was not surprising, with the majority of the male enlisted personnel having married by YOS 6 and having had children by YOS 7-10.

Female enlisted personnel who entered the Army single without children displayed different patterns of marriage and parenthood than did enlisted males. Data for this group are presented in Figure 12. Compared to the males, females were less likely to remain single without children through 6 years of service, but more likely beyond that point. At YOS 1-3, 66% of the female single entrants were still unmarried compared to 79% of the males, while 24% were married without children compared to 14% of the males. Eight percent of the females had both married and become parents by the YOS 1-3 point and 3% were now single parents. By YOS 4-6, only one-third of the single childless entrants were still in that category (for males the comparable figure was 46%). Slightly more (36%) were now married without children (higher than for enlisted males), while 23% were married with children (about the same as males). By this point, 8% of those females who entered single without children were single parents, almost triple the rate of male single parents (although fewer in absolute numbers).

The percentage of females remaining single and without children stabilized at about one-quarter in YOS 7-10. There was a noticeable shift to marriage with children as the largest category (up to 40% in YOS 11-14, but still much lower than for males (71%) at that point), and single parents continued to climb, reaching 14% in this year-of-service group. Compared to enlisted males at midcareer, females were less likely to have been married and to have been married with children, but more likely to have been single parents. In the most senior groups, the percentage of female enlisted who were single without children climbed again to more than one-third. But there were major

Figure 12: Change in Family Composition: Current Family Composition of Female Enlisted Personnel Who Entered Single without Children By Years of Service



differences between females before and after retirement eligibility. For those with 15-20 YOS, 22% were married with children and 29% were married but without children. For the retirement eligible personnel who remained in the Army, 47% were married with children while only 17% were married without children. There were no retirement eligible single parents remaining in the sample of those females who had entered the Army single without children.

Figure 13 contains similar data for male officers who were single and without children at entry. The percentage who were still unmarried and without children declined to 67% for those in YOS 1-3, but then shrank dramatically to 44% in YOS 4-6, 23% in YOS 7-10, 10% in YOS 11-14 and less than 5% beyond that point. After the first term there were not substantial differences between enlisted and officer males in the percentage remaining unmarried and without children. However, compared to enlisted personnel, officer males tended to have children slightly later in their careers. By YOS 7-10, 57% of enlisted males who had been single and childless at entry were married parents, but at this same career point, only 48% of the male officers were married parents. At YOS 11-14, this pattern continued but the differences between officers and enlisted had narrowed. Beyond the retirement point (YOS 21+), more officers than enlisted were married with children—85% versus 74%.

Female officers (Figure 14) were more likely to remain single without children than were female enlisted personnel. At YOS 7-10, 46% of female officers who entered single without children were still in that status, compared to only 25% of enlisted women. Fewer female officers than enlisted had children at this career point; 21% were married with children and an additional 2% were single parents, compared to 37% and 12% of the enlisted women. This pattern continued through the 20 YOS point. Beyond retirement eligibility, 83% of the remaining female officers who had been single non-parents at entry were still unmarried and without children, 12% were single parents and 17% were married with children. Compared to these data, 85% of the male officers beyond 21 YOS were married without children.

It is clear from these data that the patterns of marriage and family formation were quite different for males and females, and slightly different for officers and enlisted personnel. Males were more likely to marry and have children; females were more likely to remain single, but a substantial percentage of enlisted women became single parents. Compared to enlisted males, male officers became parents later in their careers, but those with children were more likely to remain beyond the 20 YOS point. These patterns put quite different sets of demands on Army policies and programs, and more detailed analysis of these patterns and dynamics of family formation will be required in the ongoing Army Family Research Program.

Family Composition and Retention Intentions

While the prior sections' focus on family composition was primarily descriptive, in this section we will begin to examine the relationships between family composition and retention intentions. A vast array of literature and prior research have found that variables such as spouse support, satisfaction with Army life, and economic variables—such as family income—are related to the decision to remain in the Army. A shrinking pool of

potential enlistees, along with increasing requirements for trained soldiers in the Army, makes improving retention a key manpower and personnel issue. Understanding the impact that families have on retention is a key element of the Army Family Research Program. In this section, we will present some preliminary conclusions on this relationship from the 1985 Survey data. The survey itself does not allow us to measure retention directly, but only the expressed intention to remain in the Army. Most of the literature does, however, demonstrate a strong relationship between intentions and behavior; later in the AFRP we expect to have additional data on retention decisions and behavior to further test the findings reported here.

Enlisted personnel were asked to respond to the following question: "How likely are you to reenlist or extend at the end of your current term of service? Assume that all special pays which you currently receive are still available." Personnel were offered an eleven-point scale on which to respond:

- 0 No Chance (includes planning to retire)
- 1 Very Slight Possibility
- 2 Slight Possibility
- 3 Some Possibility
- 4 Fair Possibility
- 5 Fairly Good Possibility
- 6 Good Possibility
- 7 Probable
- 8 Very Probable
- 9 Almost Sure
- 10 Certain

Our analysis of these responses centered on the calculation of an average response for selected family-composition subgroups. The average reenlistment probability is expressed as a number from 0 to 10 corresponding to the scale presented above. Thus, an average response of 5.0 would indicate that, on average, the personnel in that cell had a "fairly good possibility" of reenlisting.

Our intent in this analysis is to identify the direction and size of both a marriage effect and a parenthood effect on the intention to reenlist. The marriage effect measures the difference in retention intention associated with a change in marital status from single to married. The parenthood effect measures the change in retention intention associated with a change in family status from no children to children. The marriage effect is represented in the following figures as the difference between those members whose status changed from single at entry to married (as presented in the top-half of these figures). The parenthood effect is presented in the bottom-half of each figure and presents the probability of reenlisting for personnel who entered married and then subsequently did or did not add children to the family. Those married with children at entry are presented as a control group in these parenthood figures. The data must be controlled by year of service, because both the likelihood of reenlisting as well as the transition to family-composition categories are a function of length of service, which is also a proxy for age.

Figure 13: Change in Family Composition: Current Family Composition of Male Officers Who Entered Single without Children by Years of Service

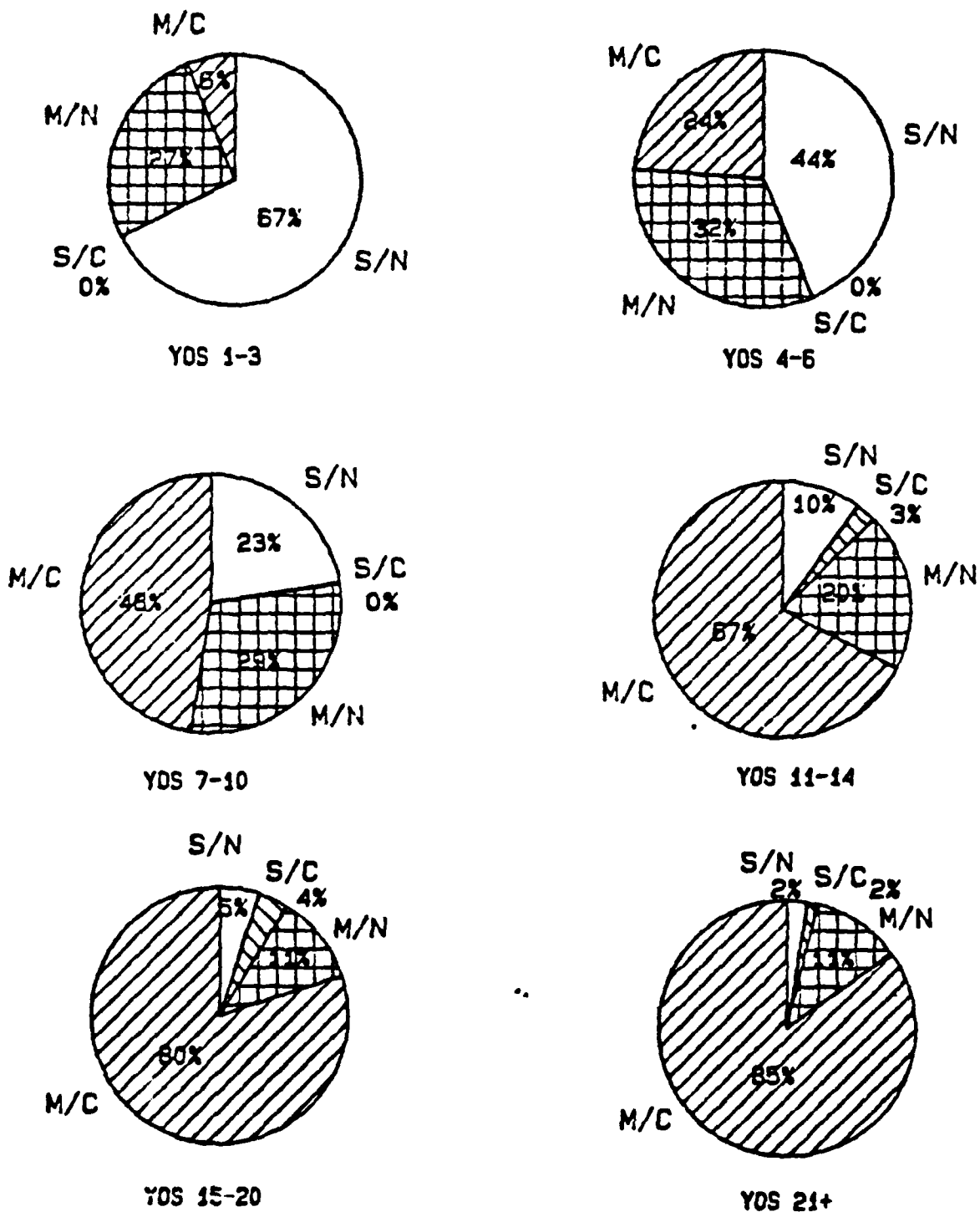
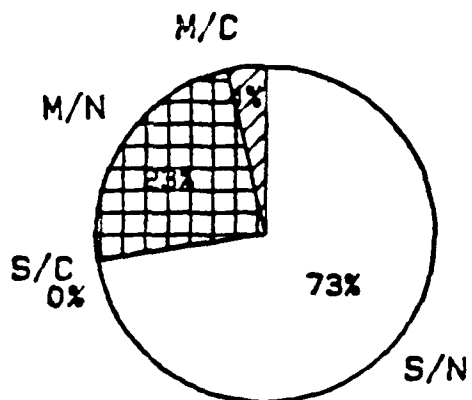
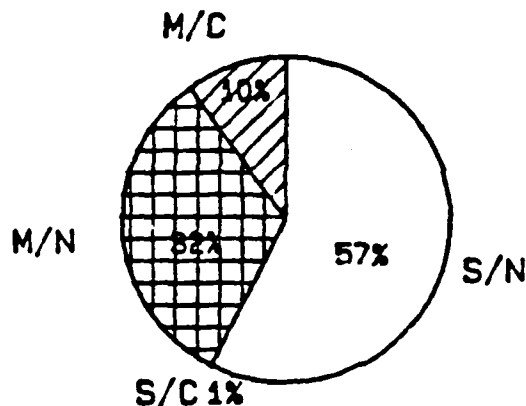


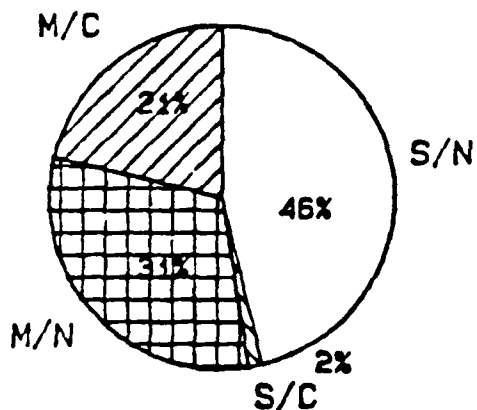
Figure 14: Change in Family Composition: Current Family Composition of Female Officers Who Entered Single without Children By Years of Service



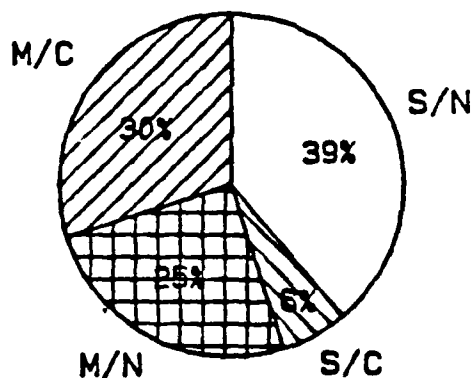
YOS 1-3



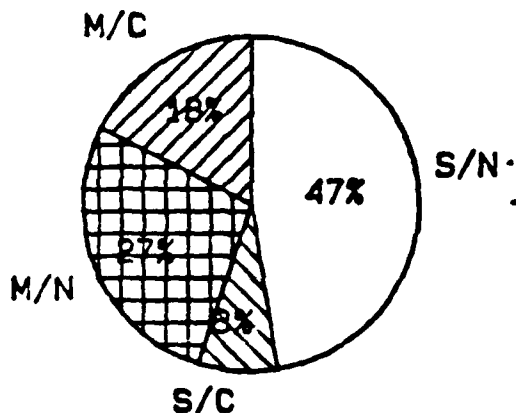
YOS 4-6



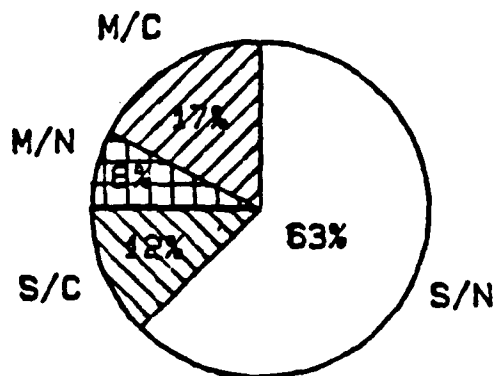
YOS 7-10



YOS 11-14



YOS 15-20



YOS 21+

Figure 15 presents the results for enlisted males and Figure 16 for enlisted females. For each year-of-service group, the first bar is essentially a control; it expresses the average reenlistment intention for those personnel whose family composition is the same as it was at entry for the two largest entry categories—single without children and married without children. The other two bars in each YOS group are the average reenlistment intentions for the transitions noted. The differences in the height of the bars represent the marriage and parenthood effects on intent to reenlist.

For enlisted males who entered single without children, both marriage and parenthood effects were quite pronounced, especially at later years of service. For example, at YOS 4-6, the average intention for those remaining single was 3.6. For those who had married, the average response increased to 4.8. With children, the response increased again to 5.4. Similar patterns were evident in the other YOS groups. Marriage clearly increased the likelihood of reenlistment for enlisted males, and parenthood increased it even more.

For those enlisted males who entered married, the parenthood effect was also evident. The first two bars in each YOS group on the graph show the average reenlistment intent for the control group—those who were still married but childless—and the group which now has children. In all cases, the parenthood effect was positive: reenlistment intent increased if there were children present. The third bar in each series is the average response for those who entered married with children and whose status remained unchanged. The average probability of reenlistment for these entering parents was even higher than that for members who did not have children at entry in every YOS case.

For enlisted females, the results were not as clear. As Figure 16 demonstrates, there was no consistent marriage effect. At YOS 4-6, marriage was associated with increased reenlistment intent, but the opposite was true at the other YOS points, although in all cases the effects (either positive or negative) were smaller than they were for males. Parenthood did have a consistently positive effect compared to marriage without children, but above 10 YOS, females who had married and had children were not more likely to intend to reenlist than were those who had remained single.

For enlisted females who had entered married without children, there were no consistent parenthood effects. At YOS less than 6, the presence of children was associated with large increases in the expressed intent to reenlist compared to families which remained childless, but this effect was negligible at YOS 7-10 and negative at YOS 11-14. Compared to families with children at entry, enlisted females who became parents after their service began had higher average reenlistment intentions in all YOS groups except 7-10, in which they were about equal.

Since officers' service is not marked by reenlistment points but is, for the most part, continuous, we have used a different measure of retention intention. Officers were asked for the total number of years they expected to

Figure 15: Average Reenlistment Probabilities by Family Composition Change and Years of Service: Male Enlisted

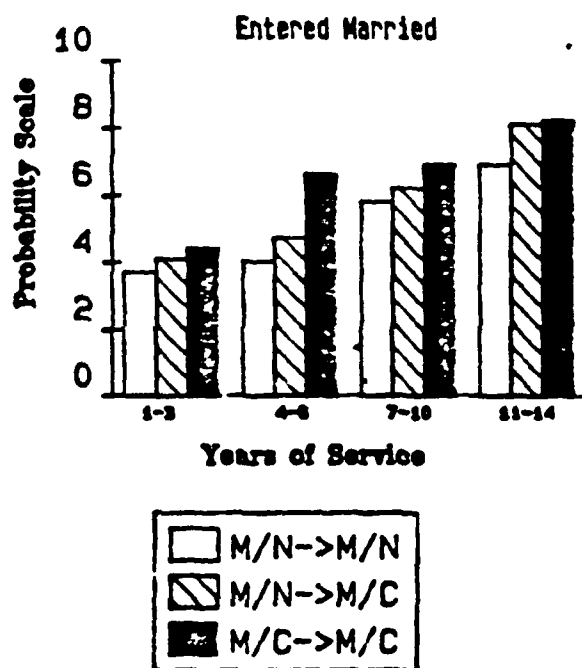
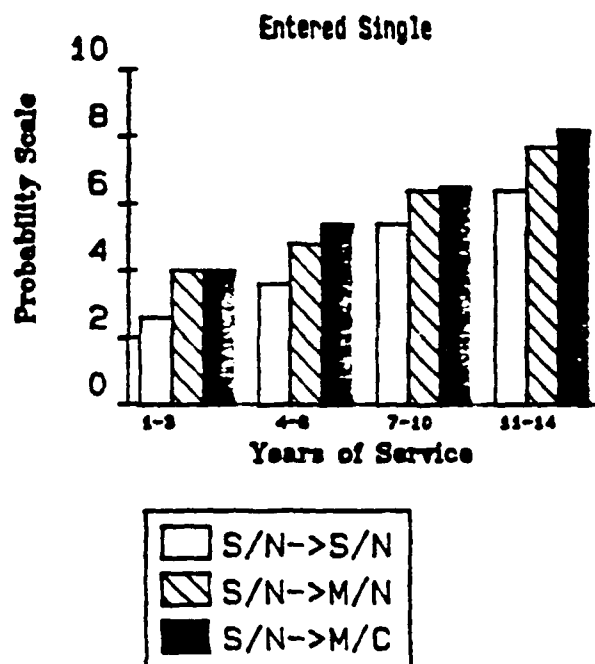
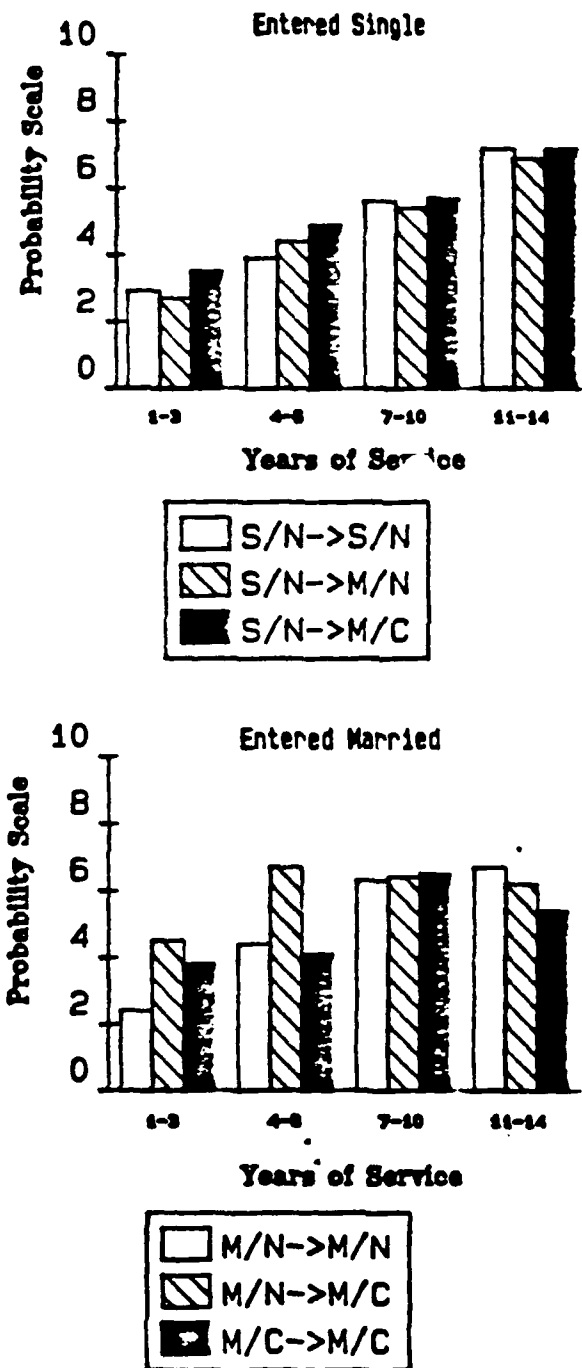


Figure 16: Average Reenlistment Probabilities by Family Composition Change and Years of Service: Female Enlisted



serve. The data in Figures 17 and 18 are the percentages of officers in each YOS and family-composition group who indicated an intention to remain in the Army for a full career—15 years or more. As with enlisted, there was a positive relationship between current YOS and the expectation of serving 15 or more years, and there was also a positive relationship between increasing length of service, the percentage who were married, and the percentage who were married with children. The problem of sorting out the marriage and parenthood effects is similar to that for the enlisted analysis.

For male officers who entered single, the marriage effect was positive in all three YOS groups, and especially below 6 YOS in which marriage was associated with a 10-point increase in the percentage expecting a long career. The parenthood effect for these officers was remarkably negative in the early years of service; for those in YOS 1-3, having children was associated with halving the percentage expecting to serve 15 years. At YOS 4-6, the parenthood effect on retention intention was slightly negative, and at YOS 7-10 it was slightly positive. In other words, there was no support among these male officers (single at entry) for a positive parenthood effect on retention intent.

Among male officers who entered married (bottom of Figure 17), a positive parenthood effect was evident. Comparing the cases of male officers who entered married without children, those who subsequently added children to the family had a higher likelihood of intending to serve a full career than did those who had not had children. The positive career response was, at all three YOS points, higher for those male officers who had children only after entry than it was for those who had children when they entered the Army.

For female officers, the marriage effect was absent in YOS 1-3, slightly positive in YOS 4-6, and negative in YOS 7-10. For the youngest cohorts, marriage after entry did not have discernible effects on the member's intention to serve 15 or more years, but at 4-6 YOS, women who had married subsequent to entry had a slightly higher likelihood of intending to serve that long. But at YOS 7-10, a smaller percentage of single-at-entry women who had married intended to remain, compared to those women who had remained single.

For women who entered single, the parenthood effect was most negative, especially in YOS 4-6. In that cell, almost one-fifth fewer women intended to serve long careers if they had both married and had children since entry. For women who entered married but without children, parenthood was associated with lower career intent, especially at 4 years of service and beyond. Compared to married women who did not have children, career intentions for women who had entered parenthood were sharply lower—as much as 15 percentage points lower in YOS 7-10. For women who entered with children, the parenthood effect was positive in YOS groups 1-3 and 7-10, while it was negative in YOS 4-6. There was no satisfactory explanation found for that decline among parents in YOS 4-6, but further research in the AFRP will address these patterns, and the family decision making that underlies them.

Figure 17: Percentage Expecting to Serve 15 or More Years by Family Composition Change and Years of Service: Male Officers

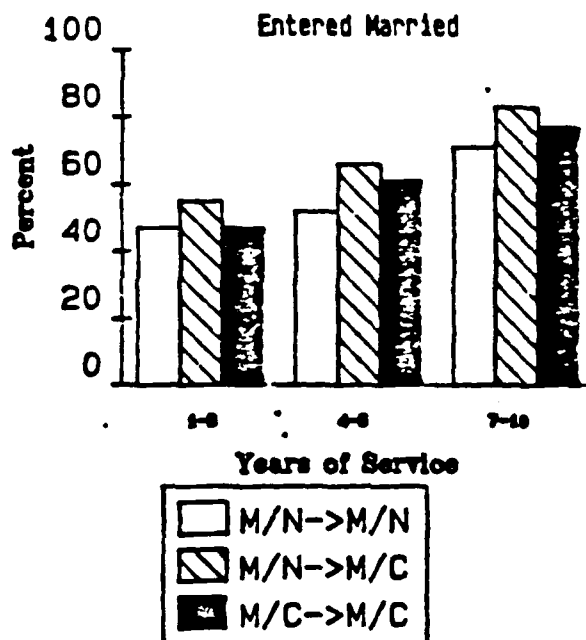
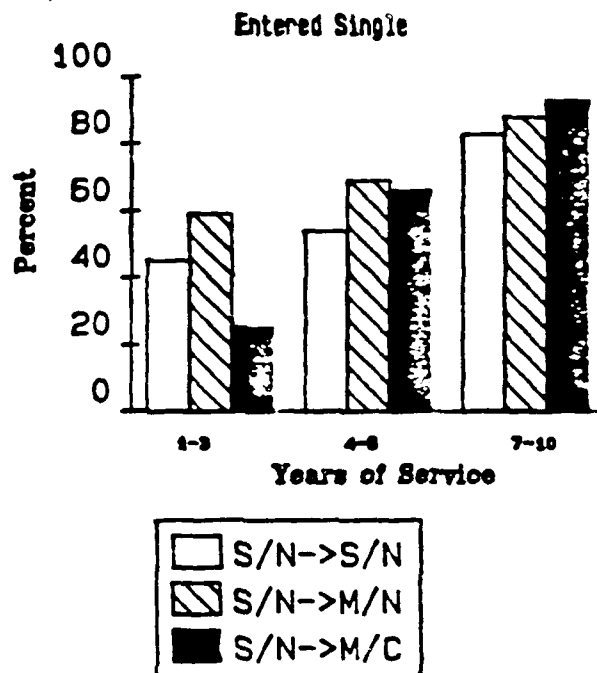
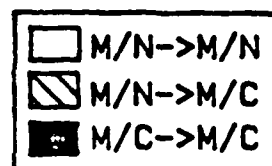
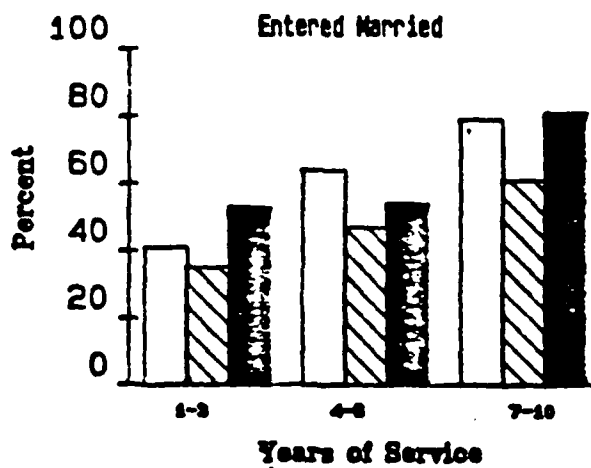
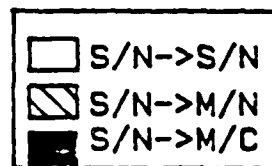
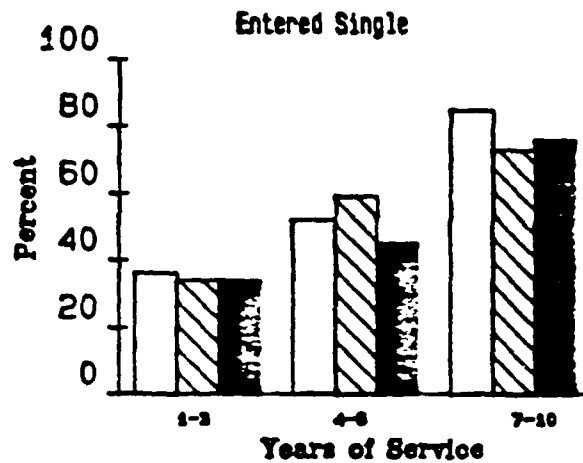


Figure 18: Percentage Expecting to Serve 15 or More Years by Family Composition Change and Years of Service: Female Officers



Summary and Conclusions

In this final section we will briefly review major findings of this paper, and then discuss these findings in the context of the ongoing AFRP. Generally, the findings and conclusions from this research parallel those of Morrison et al. (1989). The Army is in many respects a prisoner of its demographics. Because of its expressed intent of maintaining a young and vigorous force, the Army recruits a large number of young (average age, 18) enlisted personnel each year. Most of these new recruits are single. The Army is also faced with an increasing demand for technically proficient manpower, meaning that it must entice many of these young soldiers to remain in the Army for longer terms in order to recoup its training investment and secure the skill levels required. The consequence of this is that as these soldiers age, they also tend to marry and then to have children. This increases the demands on the Army to provide services for these families.

The results of these processes are clear from the demographics presented in this paper. Almost half of enlisted males and two-thirds of officer males are married with children. Only about a quarter of the women in the Army are married with children, but they have, on average, fewer years of service than the males. When controlled by length of service, the differences between males and females are smaller, but males still are more likely to be members of households with spouses and children than are females.

Married personnel tend to have a higher intention of remaining in the Army than do single personnel, especially males. This is true for enlisted personnel and officers; at each YOS level, the average reenlistment probability was higher for married males than for single males, and more married than single officers expressed an intention to remain in the Army for a full career.

For males, adding children to the family tends to increase retention intent except for officers who entered single but then had children during the first three years of service. The opposite seems to be true for females. But children can also be a distraction to performance of job duties, especially for personnel assigned overseas or separated from their families, so the Army must balance its policies and interests here as well.

In these analyses more questions and issues are raised than can be addressed, but in the course of the Army Family Research Project (AFRP) new data collection and analysis will further explore these subjects and their implications for Army policies and programs. Within the next year the availability of data on actual retention behavior will allow us to extend these analyses from simply measuring intentions to tracking actual retention. Lessons learned from the data analysis done for this report will allow us to sharpen our definition of family composition groups, to include more precise distinguishing of divorced and remarried members, and data on the age of children. The major survey to be fielded in 1989 will give us the opportunity to extend the concept of family composition to the more meaningful concept of family life cycle, which includes not only the demographics of Army families, but the psychology of how these families adjust and adapt to those demographics. Work with small groups of Army personnel, spouses and couples

will give us additional insights into the dynamics of family life in the Army as it affects retention, and especially in the process of family decision making regarding staying in or leaving the Army. More robust concepts and measures of family composition, and more informative relationships to Army policies, programs, and practices will be the result.

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